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| 10/742,153      | 12/19/2003  | Mark J. Enzmann      | 8C20.1-200          | 6011             |

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SUITE 800  
ATLANTA, GA 30339

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| EXAMINER |
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DESIR, PIERRE LOUIS

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| ART UNIT | PAPER NUMBER |
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2617

| SHORTENED STATUTORY PERIOD OF RESPONSE | MAIL DATE  | DELIVERY MODE |
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| 3 MONTHS                               | 03/08/2007 | PAPER         |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

# Office Action Summary

Application No.

10/742,153

Applicant(s)

ENZMANN, MARK J.

Examiner

Pierre-Louis Desir

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 18 September 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Response to Arguments***

1. Applicant's arguments filed on 09/18/2006 have been fully considered but they are not persuasive.

***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claims 10-11 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The claims are directed to a computer program. Computer programs claimed as computer listings per se, i.e., the descriptions or expressions of the programs are not physical "things." They are neither computer components nor statutory processes, as they are not "acts" being performed. Such claimed computer programs do not define any structural and functional interrelationships between the computer program and other claimed elements of a computer, which permit the computer program's functionality to be realized.

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1, 4-8, and 10-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 1, 4-8, and 10-17, the phrase "the 802.1x" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claim 1-2, 4-10 are rejected under 35 U.S.C. 102(e) as being anticipated by Razavilar et al. (Razavilar), U.S. Patent No. 7009952.

Regarding claim 1, Razavilar discloses a wireless device having both cellular capability and 802.1x capability (i.e., equipped with adapters for two different access technologies) (see col. 2, lines 14-16), the wireless device comprising: a signal strength detection circuit configured to detect when a strength of an 802.1x signal transmitted by an access point of an 802.1x network drops below a certain level and when a strength of a cellular signal transmitted by a cellular network is above a certain level (i.e., when the mobile terminal is in a WLAN or connected via a first access technology, it monitors a signal quality metric for the WLAN

connection 221. The program may detect three value ranges: a normal range, in which the connection continues without action by the program; and alert range, in which the program may activate a second adapter and scan 222 for the availability of a WWAN or second access technology connection; and, a disconnect or handoff range defined by a threshold at which the program proceeds with a handoff 223 from the WLAN to the WWAN. The signal quality metric being monitored may be compared to a threshold. When a signal quality metric in an alert range is detected, the program prepares a WWAN connection 223) (see col. 5, line 56 through col. 6, line 16); and a handoff initiation circuit configured to initiate a handoff of a call from the 802.1x network to the cellular network (see col. 5, line 56 through col. 6, line 16).

Regarding claim 2, Razavilar discloses a device (see claim 1 rejection) wherein the handoff initiation circuit initiates the call handoff upon receiving an indication from the signal strength detection circuit (i.e., The program may detect three value ranges: a normal range, in which the connection continues without action by the program; and alert range, in which the program may activate a second adapter and scan 222 for the availability of a WWAN or second access technology connection; and, a disconnect or handoff range defined by a threshold at which the program proceeds with a handoff 223 from the WLAN to the WWAN. The signal quality metric being monitored may be compared to a threshold. When a signal quality metric in an alert range is detected, the program prepares a WWAN connection 223) (see col. 5, line 56 through col. 6, line 16).

Regarding claim 4, Razavilar discloses a device (see claim 1 rejection) wherein the signal strength detection circuit is configured to detect when a strength of a cellular signal transmitted by a cellular network drops below a certain level and when a strength of an 802.1x signal

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transmitted by an 802.1x network is above a certain level, and wherein the handoff initiation circuit initiates a call handoff from the cellular network to the 802.1x network upon receiving an indication from the signal strength detection circuit (i.e., in the instance of a WWAN connection 320, the program in this example monitors for a connect to WLAN handoff condition. If no handoff is currently required, it continues to monitor for a connect condition. If a handoff is required, the program sends a message to the client process 321, and attempts to bring up the WLAN 322. If it fails to bring up the WLAN, it sends the client process indication of what is taken place 324. If it succeeds, the program either may proceed with a handoff to the WLAN, or it may further monitor the quality of service or the signal quality metric. It may require that the metric remain good enough or it may require that the metric improve and cross an additional threshold before it will proceed with the handoff to the WLAN. When the program proceeds, it changes its routing table 323 and sends the connection indication to the client process 324. As in the instance of beginning in a WLAN, the order of steps can be modified. After bring up the WLAN connection, for instance, the program can signal a router to hand off the session connection either before or after it modifies its own routing tables or otherwise modifies its connection at the link layer) (see col. Figs. 2-3, and col. 4, line 61 through col. 5, line 19, and col. 6, line 56 through col. 7, line 9).

Regarding claim 5, Razavilar discloses a method for handing off a call from an 802.1x network to a cellular network (see abstract), the method being performed by a wireless device (see fig. 1), the method comprising: measuring the strength of an 802.1x signal received by the wireless device from an access point of the 802.1x network (i.e., when the mobile terminal is in a WLAN or connected via a first access technology, it monitors a signal quality metric for the

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WLAN connection 221. The program may detect three value ranges: a normal range, in which the connection continues without action by the program; and alert range, in which the program may activate a second adapter and scan 222 for the availability of a WWAN or second access technology connection; and, a disconnect or handoff range defined by a threshold at which the program proceeds with a handoff 223 from the WLAN to the WWAN. The signal quality metric being monitored may be compared to a threshold. When a signal quality metric in an alert range is detected, the program prepares a WWAN connection 223) (see col. 5, line 56 through col. 6, line 16); determining whether the strength of the 802.1x signal has dropped below a certain level (see col. 5, line 56 through col. 6, line 16); measuring a strength of a cellular signal being received by the wireless device from a cellular network (see col. 5, line 56 through col. 6, line 16); determining whether the strength of the cellular signal is above a certain level (see col. 5, line 56 through col. 6, line 16); and wherein if the 802.1x signal strength is determined to be below a certain level and the cellular signal strength is determined to be above a certain level, initiating a call handoff of the wireless device from the 802.1x network to the cellular network (see col. 5, line 56 through col. 6, line 16).

Regarding claim 6, Razavilar discloses a method (see claim 5 rejection) further comprising: after the handoff has occurred, severing the connection between the wireless device and the access point of the 802.1x network (i.e., the wireless device is operating in a WWAN after the handoff) (see figs. 2-3).

Regarding claim 7, Razavilar discloses a method (see claim 6 rejection) further comprising: if a determination is made that the strength of the 802.1x signal has dropped below a certain level and that the strength of the cellular signal is above a certain level, the wireless

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device querying the cellular network for signaling and IP connectivity information; and communicating the signaling and IP connectivity information from the wireless device to the 802.1x network (see figs. 2-3, col. 3, lines 49-60, and col. 4, lines 30-38, and col. 5, line 56 through col. 6, line 16).

Regarding claim 8, Razavilar discloses a method for initiating a call handoff from a cellular network to an 802.1x network (see abstract), the method being performed by a wireless device, the method comprising: measuring the strength of a cellular signal being received by a wireless device from a cellular network (see col. Figs. 2-3, and col. 4, line 61 through col. 5, line 19); determining whether the strength of the cellular signal has dropped below a certain level (see col. Figs. 2-3, and col. 4, line 61 through col. 5, line 19); measuring a strength of an 802.1x signal being received by the wireless device from an access point of an 802.1x network (see col. Figs. 2-3, and col. 4, line 61 through col. 5, line 19); determining whether the strength of the 802.1x signal is above a certain level (see col. Figs. 2-3, and col. 4, line 61 through col. 5, line 19); and wherein if the cellular signal strength is determined to be below a certain level and the 802.1x signal strength is determined to be above a certain level, performing a call handoff from the cellular network to the 802.1x network (see col. Figs. 2-3, and col. 4, line 61 through col. 5, line 19, and col. 6, line 56 through col. 7, line 9).

Regarding claim 9, Razavilar discloses a method (see claim 8 rejection) f further comprising: after the handoff has occurred, severing the connection between the wireless device and the cellular network (i.e., the wireless device is operating in a WWAN after the handoff) (see col. Figs. 2-3, and col. 4, line 61 through col. 5, line 19, and col. 6, line 56 through col. 7, line 9).



Regarding claim 10, Razavilar discloses a computer readable medium encoded with a computer program for initiating a call handoff from a 802.1x network to a cellular network (see abstract), the program comprising: a first code segment, the first code segment determining whether the strength of an 802.1x signal being received by a wireless device from an access point of an 802.1x network has dropped below a certain level (see figs. 2-3, and col. 5, line 56 through col. 6, line 16); a second code segment, the second code segment determining whether the strength of a cellular signal being received by the wireless device from a cellular network is above a certain level (see figs. 2-3, and col. 5, line 56 through col. 6, line 16); and a third code segment, if the 802.1x signal strength is determined to be below a certain level and the cellular signal strength is determined to be above a certain level, the third code segment initiating a call handoff from the 802.1x network to the cellular network (see figs. 2-3, and col. 5, line 56 through col. 6, line 16).

Regarding claim 11, Razavilar discloses a computer readable medium encoded with a computer program for performing initiating a call handoff from a cellular network to an 802.1x network (see abstract), the program comprising: a first code segment, the first code segment determining whether the strength of a cellular signal being received by a wireless device from a cellular network while the wireless device is participating in a call over the cellular network has dropped below a certain level (see col. Figs. 2-3, and col. 4, line 61 through col. 5, line 19, and col. 6, line 56 through col. 7, line 9); a second code segment, the second code segment determining whether the strength of an 802.1x signal being received by the wireless device from an access point of an 802.1x network is above a certain level (see col. Figs. 2-3, and col. 4, line 61 through col. 5, line 19, and col. 6, line 56 through col. 7, line 9); and a third code segment, if

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the cellular signal strength is determined to be below a certain level and the 802.1x signal strength is determined to be above a certain level, the third code segment initiating a call handoff from the cellular network to the 802.1x network (see col. Figs. 2-3, and col. 4, line 61 through col. 5, line 19, and col. 6, line 56 through col. 7, line 9).

Regarding claim 12, Razavilar discloses an 802.1x network comprising: an access point (see fig. 1); and a server (see fig. 1), the server comprising logic configured to determine when a call handoff switch from the 802.1x network to a cellular network is to occur and to communicate with a media gateway to cause the call handoff switch to occur (see figs. 2-3, and col. 5, line 56 through col. 6, line 16).

Regarding claim 13, Razavilar discloses a cellular network comprising: call handoff circuitry configured to determine when a call handoff switch from an 802.1x network to the cellular network is to occur and to communicate with a media gateway to cause the call handoff to occur (see col. Figs. 2-3, and col. 4, line 61 through col. 5, line 19, and col. 6, line 56 through col. 7, line 9).

Regarding claim 14, Razavilar discloses a server in communication with a media gateway, the server comprising logic configured to determine when a call handoff switch from a cellular network to the 802.1x network is to occur and to communicate with a media gateway that causes the media gateway to make appropriate connections to cause the call handoff switch to occur (see figs. 2-3, and col. 5, line 56 through col. 6, line 16).

Regarding claim 15, Razavilar discloses a server (see claim 14 rejection) wherein said logic determines whether or not a signal level of a signal of a signal being transmitted from the 802.1x network to a wireless device exceeds a signal level of a signal being transmitted from the

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cellular network to the wireless device (see figs. 2-3, and col. 5, line 56 through col. 6, line 16), said logic determining that a handoff from the 802.1x network to the cellular network should occur when the signal level of the signal being transmitted from the 802.1x network to the wireless device does not exceed the signal level of the signal being transmitted from the cellular network to the wireless device (see figs. 2-3, and col. 5, line 56 through col. 6, line 16).

Regarding claim 16, Razavilar discloses a cellular network comprising logic configured to perform a call handoff switch from the cellular network to the 802.1x network so that a call being carried on the cellular network can be switched from the cellular network to the 802.1x network (see col. Figs. 2-3, and col. 4, line 61 through col. 5, line 19, and col. 6, line 56 through col. 7, line 9).

Regarding claim 17, Razavilar discloses a call handoff switching circuit of a media gateway, the switching circuit being in communication with an 802.1x network and with a cellular network (see abstract, figs. 2-3), the switching circuit comprising: first logic configured to determine if a call handoff is to occur from an 802.1x network to a cellular network and to determine if a call handoff is to occur from a cellular network to an 802.1x network (see figs. 2-3, and col. 5, line 56 through col. 6, line 16); and second logic configured to switch a call connection from an address associated with the 802.1x network to an address associated with the cellular network when the first logic determines that a call handoff is to occur from the 802.1x network to the cellular network, and configured to switch a call connection from an address associated with the 802.1x network to an address associated with the cellular network when the first logic determines that a call handoff is to occur from the cellular network to the 802.1x network (see figs. 2-3, and col. 5, line 56 through col. 6, line 16).

*Claim Rejections - 35 USC § 103*

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Razavilar in view of Nair et al. (Nair), Pub. No. US 20040127208.

Razavilar discloses a device as described above (see claim 1 rejection).

Although Razavilar discloses a device as described, Razavilar does not specifically disclose a device wherein the handoff initiation circuit initiates the call handoff upon determining that a handoff selector has been activated by a user of the wireless device.

However, Nair discloses a device wherein the handoff initiation circuit initiates the call handoff upon determining that a handoff selector has been activated by a user of the wireless device (see paragraphs 37-39, and 58).


Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings as described to arrive at the claimed invention. A motivation for doing so would have been to provide a method wherein the user could interact with the computer or system (see paragraph 19).

*Conclusion*

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pierre-Louis Desir whose telephone number is (571) 272-7799. The examiner can normally be reached on Monday-Friday 8:00AM- 5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Feild can be reached on (571) 272-4090. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Pierre-Louis Desir  
03/04/2007

JEAN GELIN  
PRIMARY EXAMINER

